

Office Action Summary	Application No.	Applicant(s)
	09/830,040	ECCLES, CHRISTOPHER ROBERT
Examiner Rick Palabrica	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 April 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 5,23 and 33-35 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, 6-22 and 24-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6) Other: _____ .

DETAILED ACTION

1. Applicant's election without traverse of Group IA, species Ic, tungsten for the cathode, platinum for the cathode, water for the electrolyte and the reactive ingredient consumed by the reaction, hydrogen being the product of metal hydride dissociation, and deuterium-deuterium reaction for fusion pathway, in Paper No. 9 is acknowledged.

2. Contrary to the applicant's election of deuterium-deuterium for the fusion pathway, the examiner considered for further examination the hydrogen-hydrogen fusion pathway species because it is more appropriate in view of the applicant's election of water for the electrolyte.

Specification

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to provide an adequate written description of the invention and as failing to adequately teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure.

The claimed invention is a method for generation of energy by sub-ground state transition and fusion of hydrogen. However, there is no adequate or enabling disclosure of how such could be accomplished using the applicant's invention.

A disclosure in an application, to be complete, must contain such description and detail as to enable any person skilled in the art of science to which the invention pertains, to make and use the invention as of its filing date, *In re Glass*, 181 USPQ 31.

It is not clear from the disclosure how hydrogen atoms in a stable ground state can be induced to undergo transition to a sub-ground state. For example, the generally accepted relationship between the electron wavelength and the allowed radii is as shown by the applicant in equation (2) on page 5 of the specification, wherein n = an integer. It is unclear how and in what manner fractional values of n would be allowable, as alleged by the applicant (e.g. see page 5, line 6 of the specification). No experimental evidence is provided showing the existence of hydrogen atoms having such fractional values of n. The alleged galactic cluster emissions at a wavelength of about 30.8 nm cannot be immediately seen to prove that hydrogen atoms exist in sub-ground states.

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Applicant further alleges that the accepted ground state, which he admits as being very stable, can be induced if the atom is in close proximity to another system that acts as a "receptor-site" for the exact energy quantum required to affect the transition. Catalysts such as ions of rubidium, titanium and potassium are alleged as capable of providing these "receptor-sites" (e.g., see page 6, last two full paragraphs and page 9). Applicant discusses the theory of how these catalysts can initiate the transition of hydrogen to sub-ground state, but there is presents no experimental evidence or accepted scientific data for support.

There is also neither an adequate nor sufficient and enabling disclosure of exactly how and in what manner, applicant's invention could be made to operate in the manner to actually perform or accomplish the indicated results on the use of these catalysts.

The disclosure is insufficient in failing to set forth, operative embodiments or examples of the invention, including parameters, such as, catalyst to water ratio required to effect hydrogen transition to sub-ground state. Examples and description should be of sufficient scope as to justify the scope of the claims. See MPEP 608.01(p).

The applicant alleges that his method includes generating a magnetic field to move the plasma discharge away from the cathode to minimize erosion and extend the operating life of the system (e.g. see claim 19 and page 3, 4th full paragraph of the specification). However, there is no adequate nor sufficient and enabling disclosure of exactly how and in what manner, applicant's invention could be made to operate in the

manner to actually perform or accomplish the indicated results. The disclosure is insufficient in failing to set forth, operative embodiments or examples of the invention, including parameters, such as, strength of the magnetic field to be applied in order to obtain the desired result. Examples and description should be of sufficient scope as to justify the scope of the claims. See MPEP 608.01(p).

Based on the system temperatures cited by the applicant, the disclosed hydrogen-hydrogen reaction fusion alleged to take place is in the realm of "cold fusion." It is the consensus by those skilled in the art that there is no reputable evidence to support the allegation or claim that cold nuclear fusion is actually taking place nor is there any reputable evidence to support the allegation or claim of excess heat production. See also the Board decision in *Ex parte Dash*, 27 USPQ 2d 1481, wherein it was held that the examiner did not err in rejecting claims for "cold fusion" of nuclear energy for lack of enablement under 35 USC 112 and as inoperative and lacking utility under 35 USC 101.

The disclosure appears to only set forth a theoretical concept of generating energy by causing sub-ground state transition in hydrogen and fusion of hydrogen nuclei, without any specific instructions, etc. on how such is to be actually accomplished. This view is supported by the failure to set forth a full example of the parameters of an operative apparatus for effecting said transition and fusion. One cannot rely on the skill in the art for the selection of the proper quantitative values to present an operative system based on applicant's theories and concepts since these

theories and concepts have not been fully and adequately disclosed. See *Bank v. Rauland Corp.*, 64 USPQ 93, *In re Corneil et al.*, 145 USPQ 697.

It is thus considered that the examiner (for the reasons given above) has set forth a reasonable and sufficient basis for challenging the adequacy of the disclosure. The statute requires the application itself to inform, not to direct others to find out for themselves; *In re Gardner et al.*, 166 USPQ 138, *In re Scarborough*, 182 USPQ 298. Note that the disclosure must enable a person skilled in the art to practice the invention without having to design structure not shown to be readily available in the art, *In re Hirsch*, 131 USPQ 198.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-4, 6-22 and 24-32 are rejected under 35 U.S.C. 101 because the claimed invention as disclosed is inoperative and therefore lacks utility.

The reasons the invention as disclosed is inoperative are the same as the reasons set forth in section 3 above as to why the disclosure is objected to, and said reasons are incorporated herein.

There is no factual evidence to show that the invention is operative.

It is well established that where the utility of the claimed invention is based upon allegations that border on the incredible or allegations that would not be readily accepted by a substantial portion of the scientific community, the applicant must submit sufficient substantiating evidence of operability. Note *In re Houghton*, 167 USPQ 687 (CCPA 1970), *In re Ferens*, 163 USPQ 609, *Puharich v. Brenner*, 162 USPQ 136 (CA DC 1969), *In re Pottier*, 153 USPQ 407 (CCPA 1967), *In re Ruskin*, 148 USPQ 221 (CCPA1966), *In re Citron*, 139 USPQ 516 (CCPA 1963), and *In re Novak*, 134 USPQ 335 (CCPA1962).

Claim Rejections - 35 USC § 112

5. Claims 1-4, 6-22 and 24-32 are rejected under 35 U.S.C. 112, first paragraph, for the reasons set forth in the objection to the specification in section 3 above.

6. Claims 4, 6-12, 17-22, 24-26, 28, 29 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The above claims do not set forth steps in the claimed inventive process of energy generation by sub-ground state transition and fusion of hydrogen.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, telephone number is 703-308-1113.

RJP
May 14, 2002